

HAZARDOUS MATERIALS DATA SHEET (PLEASE COMPLETE APPLICABLE SECTIONS)

1.	PR	ODUCT NAME, NUMBER, SYNONYM: BIOBOR JF									
2.	MAI	NUFACTURER'S NAME: U.S.Borax & Chemical Corporation									
3.	MAI	NUFACTURER'S ADDRESS: 3075 Wilshire Blvd., Los Angles, California 90005									
4.	PR	OCEDURE IN CASE OF BREAKAGE OR LEAKAGE: If exposed to atmospheric moisture in a leaky									
	container, product would tend to hydrolyze. Product should be dumped and washed										
	do	down with water.									
5.	TR.	ANSPORTATION AND STORAGE REQUIREMENTS: There are no transportation restrictions.									
	Ma	Material should be stored in air tight and water tight containers to prevent									
	<u>h</u> y	ydrolysis. BIOBOR has a pour point of -27.5°F. and is stable above this temperature.									
6	FIR	ST AID TREATMENT:									
	Α.	SKIN CONTACT: Wash with soap and water)									
) If irritation									
) persists, consult) a physician									
	В.	EYE CONTACT: Wash with water)									
	C.	INH ALATION: None									
	D.	D. ANTIDOTE IN CASE OF SWALLOWING: <u>Contact a physician immediately</u>									
7.	PH'	YSIOLOGICAL PROPERTIES:									
	Α.	A. ACUTE ORAL TOXICITY: LD ₅₀ of BIOBOR for male albino rats is 3.16 ml/kg. of body weight									
	В.	LOCAL EFFECTS UPON EYES: <u>An application of BIOBOR to the eyes of albino rabbits</u> produced moderate eye irritation characterized by conjunctivitis and iritis in all rabbits and mild corneal opacity in two of three rabbits.									
	1	LOCAL EFFECTS UPON SKIN: <u>Acute dermal LD₅₀ for albino rabbits is 4.64 ml/kg. of body</u> weight with confidence limits of from 2.98 to 7.23 ml./kg. A single application of the undiluted material produced mild to moderate dermal irritation characterized by erythema and edema and followed by desquamation. ESTIMATE OF ACUTE HAZARD BY INHALATION (VOLATILE MATERIALS): <u>None</u>									

F.	ESTIMATED THRESHOLD LIMIT VALUE (IF NOT ON CURRE MENTAL INDUSTRIAL HYGIENISTS): ?	ENT LIST BY AMERICAN CONFERENCE OF GOVERN-					
<u>C</u>	MICAL AND PHYSICAL PROPERTIES:						
A.	SPECIFIC GRAVITY (WATER = I) 1.05 g/cc	B. VAPOR DENSITY (AIR = 1) Neutralization #ASTM D					
c.	VAPOR PRESSURE mm Hg AT 25°C. psi at 100°F	0 D. pH 664 14.8 (I)					
E,	CORROSIVE ACTION ON COMMON MATERIALS SUCH AS: A LACQUERS, ENAMELS, FABRICS: Compatible with						
	plastics such as polyethylene. Solvent to	o most paper coatings. Should be stored					
	in metal or glass containers having polyet	thylene lined closures.					
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F.	DOES THE MATERIAL DECOMPOSE WHEN EXPOSED TO AIR	R? WATER? HEAT? STRONG OXIDIZERS? Will					
F.	DOES THE MATERIAL DECOMPOSE WHEN EXPOSED TO AIR						
		pheric moisture.					
	hydrolyze when exposed to water and atmosp	pheric moisture.					
	hydrolyze when exposed to water and atmost for MIXTURES GIVE THE PERCENTAGE COMPOSITION OF COMPOUND	pheric moisture. FINGREDIENTS:					
	hydrolyze when exposed to water and atmospherical for MIXTURES GIVE THE PERCENTAGE COMPOSITION OF COMPOUND 2,2*-oxybis (4,4,6-trimethyl-1,3,2 dioxa-	pheric moisture. FINGREDIENTS:					
	hydrolyze when exposed to water and atmost for MIXTURES GIVE THE PERCENTAGE COMPOSITION OF COMPOUND	pheric moisture. FINGREDIENTS:					
	hydrolyze when exposed to water and atmospherical for MIXTURES GIVE THE PERCENTAGE COMPOSITION OF COMPOUND 2,2*-oxybis (4,4,6-trimethyl-1,3,2 dioxa-borinance)	pheric moisture. FINGREDIENTS: PERCENT					
	hydrolyze when exposed to water and atmospherical for MIXTURES GIVE THE PERCENTAGE COMPOSITION OF COMPOUND 2,2*-oxybis (4,4,6-trimethyl-1,3,2 dioxaborinance) 2,2*-(1-methyltrimethylenedioxy)bis- (4	Pheric moisture. FINGREDIENTS: PERCENT					
	hydrolyze when exposed to water and atmospherical for MIXTURES GIVE THE PERCENTAGE COMPOSITION OF COMPOUND 2,2*-oxybis (4,4,6-trimethyl-1,3,2 dioxa-borinance) 2,2*-(1-methyltrimethylenedioxy)bis- (4 methyl-1,3,2-dioxaborinane)	Pheric moisture. FINGREDIENTS: PERCENT					
	hydrolyze when exposed to water and atmospherical percentage composition of COMPOUND 2,2*-oxybis (4,4,6-trimethyl-1,3,2 dioxaborinance) 2,2*-(1-methyltrimethylenedioxy)bis- (4 methyl-1,3,2-dioxaborinane) Petroleum Naptha	Pheric moisture. FINGREDIENTS: PERCENT 95 5 S, ALCOHOLS, KETONES, CHLORINATED					

9.	PRECAUTIONS FOR NORMAL CONDITIONS OF USE: <u>BIOBOR</u> should be protected from water											
		contamination. Avoid contact with the eyes and prolonged exposure to the										
		skin. Do not take internally.										
10.	RE	RECOMMENDED PROTECTIVE EQUIPMENT: Face shield and rubber gloves.										
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11.	A.	FLASH POINT OF: CLOSED CUP; OPEN CUP; IF F.P. CHANGES DURING EVAPORATION GIVE DATA:					G					
	Using ASTMD-56 102°F Using ASTMD -92 135°F.											
								; UPPER				
								; NOX				
								rure °F				
								503 191				
	F. WHAT PRODUCTS MIGHT BE FORMED IN THE EVENT OF FIRE OR ABNORMAL TEMPERATURES?											
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	G. SUITABLE EXTINGUISHING AGENTS:											
12.	. INFORMATION FURNISHED BY: William Zive								-			
	TITLE:				Senior Technical Representative							
	COMPANY:				U.S. Borax & Chemical Corportion							
	ADDRESS:				50 Rockefeller Plaza, New York, N.Y. 10020							
	DATE:				June 9, 1969							
	DA.	ı 			Julie 7,	1707						

NOTE: INFORMATION IN REGARD TO A MATERIAL'S COMPOSITION WILL BE TREATED AS CONFIDENTIAL AND USED FOR THE PURPOSE OF PROTECTING THE HEALTH AND SAFETY OF MCDONNELL DOUGLAS CORP. EMPLOYES AND THE SAFEGUARDING OF ITS PROPERTY. IT WILL ALSO BE USED FOR THE PURPOSE OF COMPLYING WITH LOCAL, STATE AND FEDERAL ORDINANCES, LAWS AND CODES, AND REQUIREMENTS OF GOVERNMENTAL AGENCIES.

THE COMPLETED FORM SHOULD BE RETURNED TO PURCHASING, DOUGLAS AIRCRAFT DIVISION, LONG BEACH, CALIF. 90801.

- (1) Expressed as milligrams KOH required to neutralize all acidic constituents in 1 gram of sample.
- (2) Mol.wt. of hydrocarbons by thermo-electric measurement of vapor pressure using vapor pressure osmometer and benzene as the reference standard.